Agile Business Analysis – Individual Report

Make Programming Sexy

~~avoid print («Hello, World!»)~~

Master of Science in Business Information Systems

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1 Individual Report

The project in the module Agile Business Analysis deals with the topic of technical IT which are offered as modules in the Business Information Technology study program and how a new approach to teaching can make these modules more interesting for students. An agile approach was chosen for this project. The chosen business analysis techniques are based on the guidelines described in the BABOK.

The aim of this individual report is to show what role I played as a member of the project team, what I contributed to achieve the goal and what my learning is in terms of the knowledge areas and principles of agility.

1.1 My role in the project

We as a project team, consisting of four people, allocated roles in such a way that we defined three Business Analyst / Requirements Engineer and one Scrum Master / Product Owner. I filled out the role of the Business Analyst / Requirements Engineer and have retained this role throughout the project.

The aim of the project was to develop a proposal for a curriculum that would make technical informatic courses more attractive for students in the Business Information Technology degree program.

To achieve this goal, as one of the three business analysts, I tried to understand the problem in a first step. The project was brought to the project team through the sponsor Dr. Knut Hinkelmann. After the exchange with our sponsor and a first document analysis of a Master Thesis that addresses the same topic, we started to understand the problem and the goal of the sponsor.

We understood that Business information technology students can develop in different professional directions after their studies. One of them is technical IT. After doing some research, we found out that the economy is urgently looking for IT specialists, but the students of the BIT study program often struggle with these technical IT modules. In order to find out why those modules seem so difficult and not appealing to some students, we started to define our main stakeholder groups, which consists of students and lectures which includes our sponsor.

The definition of our stakeholders helped us to understand where we need to raise our requirements and who is suitable to evaluate our solution. In our approach as business analysts, we have focused on close cooperation with our stakeholder groups in order to have a constant exchange with the stakeholder groups and to have our proposed solutions evaluated and developed further in each sprint. This should help to ensure that the needs are reflected in the proposed solutions. When using the techniques for the collection of requirements and evaluation of solutions, we followed the BABOK Guide. In the three sprints, the document analysis, survey, interviews and focus groups were used to collect requirements. For the evaluation we used the technique focus group and interviews.

The result of each sprint (1-3) was a proposal for a curriculum aimed at making technical IT more appealing to BIT students. In a last step this approach of teaching was presented to our sponsor in a pitching session.

1.2 My contribution

I was involved as business analyst in every one of those sprints. We as a team had a close working relationship with our stakeholders, but we also worked closely together in our team itself. In the first sprint I went through existing documentation on this topic provided by our sponsor and conducted internet research to understand the problem and the current situation clearly. Together in the group, each of the business analysts contributed their knowledge so that we could align our knowledge. I helped the team to document the actual situation and the first draft of an idea of the solution. I was also an active participant in the interview with the sponsor and the current BIT student. In a second sprint, we worked as a team to create a survey of a larger number of students and lecturers. I examined the results of the survey and identified the requirements. With these requirements we were able to further develop our first draft of the solution and present it for evaluation in a focus group. I was able to take the lead in the acquisition of the participants and then later in the execution of the focus group. I documented and compiled the resulting changes. In the third sprint I was an active participant of the focus group and helped to prepare the final product, which was later presented to the sponsor in a pitch presentation. Due to the stronger involvement in the creation of the presentation, I only got a small active part in the presentation itself. Throughout the whole project, I constantly updated the Trello Board with my tasks, so that the product owner has a clear

vision of which tasks have already been completed, which tasks are still pending or open and the current status of our project. Proposed solutions, which were evaluated by the stakeholder groups, were always created and designed together as a team. Close cooperation within the team itself ensured that everyone had the same understanding. This helped us in the continuous development of the product.

1.3 My learnings

During my Bachelor's degree in Business Information Technology and the IREB certification, I was already able to learn some techniques that were certainly advantageous in determining and presenting requirements. It was nevertheless exciting to get to know a new teaching aid. During this work I tried to get more involved with the BABOK Guide. The subchapter my learnings has been divided up in such a way that the first item shows the general learnings in connection with the agile approach. In the further points I refer to the knowledge areas described in the BABOK Guide.

My general learnings

At the beginning of the project in the first sprint, we had not yet assigned the roles very specifically. Everyone did a little bit of everything. This caused a bit of chaos. In general, it is important to know what role you are playing, but unfortunately, a not clearly assigned role allocation is also encountered too often in practice. In addition to the roles it is also important to define which tasks the corresponding role takes over. Our Trello Board had only generic tasks in the beginning and no assignments. But with time and through coaching we got a better grip on this. We have found that if you use the board correctly and keep it up to date, it is easier to plan the next steps. Every participant and especially the product owner gets a clear overview of which tasks have been completed, which are still open or pending. With the help of this information the burndown chart can be created, which then shows the product owner which communication with stakeholders is extremely important. Especially in the agile area, to take up requirements, evaluate solutions, perceive changes. With the agile approach you always have an MVP. It is difficult to focus partly on something that is important for our project. It is difficult to limit oneself to a small part of a solution and to constantly develop it further. The retrospective after every sprint where you groom a backlog, check the collaboration and see if you still have the vision in mind is essential. Through this constant questioning, the quality of the output increases. Mistakes made in the previous sprint can be made better in the next sprint. There is a constant reflection in the quality of the work.

Strategy analysis

For the strategy analysis we used interviews and document analysis. In a first step we held the interview with the sponsor. He gave us the first impressions and problems from his point of view. We focused on the solution very quickly. We created a future state very quickly. We were tempted to let ourselves be tempted to understand the problem quickly. We immediately started to develop a prototype based on Raspberry PI to visualize the server-client interaction. Here we could have taken some time to process the needs from the analysis of the current state.

Business analysis planning and monitoring

We quickly had an overview here of which stakeholders we should address. Because I and another project member had already completed a Bachelor in BIT at the FHNW, we were already in contact with the lecturers and former and current students. I found this extremely helpful in knowing the stakeholders. It simplified the communication.

Elicitation and collaboration

Especially because of the agile approach we chose to carry out this project, we had regular exchanges. This helps to ensure that all stakeholders have the same understanding. Our existing network of students and lecturers has also been very helpful here. By having our drafts evaluated by the stakeholders in each sprint, we were able to get a common understanding. When collecting requirements I had to be careful myself, as I already went through the study process and did not project my own view on the solution. As already mentioned in the upper part it makes the work easier if you already have contact details and you can easily find them.

Requirements lifecycle management

We have collected a large number of requirements from both stakeholder groups (lecturers and students). What I have learned here as a key lesson is that you can never please all stakeholders and that certain requirements contradict each other. Then you have to prioritize the requirements. The agile approach supported us here as well. Requirements were converted into a solution which in turn was continuously evaluated with the stakeholders. This in turn helped us to approve the requirements**.**

Requirements analysis and design definition

In the team itself, we often had different approaches ready for the solution definition. But we always showed the stakeholders only one solution per sprint. On the basis of these we took up further requirements and tried to expand our solution. We were also lucky that our stakeholders were often available. In retrospect, it would have made sense to prepare several solutions and

offer the customer alternatives. Especially if the stakeholders were not available so often to assess the solutions.

Solution evaluation

Since our product is not a software that has been developed over time, but an approach to teaching and learning technical IT modules that students like, we found it difficult to measure the solution performance. Unlike tangible prototypes, which have certain functions, our solution is more difficult to measure, since it involves a whole curriculum. But throughout the feedbacks assessments we did within the focus groups we are confident, that this approach could help students to make technical IT more appealing. In a next step, this approach could be tested as a pilot in the BIT study program.

“Perfection is not attainable, but if we chase perfection we can catch excellence.”

-Vince Lombardi